

## Fish Habitat Factsheet #5

# Locating Northern Pike Habitat on Your Property

*Landowners can play a vital role in the better management of fisheries by helping to locate and identify fish habitat on their properties. A basic understanding of the habitat needs of a particular species and where and when to look for the fish is all you need. A notebook, thermometer, hip boots and small boat are helpful.*



*Backwater areas of marshes and streams provide Northern pike habitat. Photos: Mary Penney, NY Sea Grant*

### The Preferred Spawning Habitat of Northern Pike

- Seasonally flooded, low current, shallow (<3 ft ) areas, connected to open waters with aquatic vegetation: emergent, submerged and floating
- Northern pike are present in prime spawning habitat late March-early April or at water temperatures of 50°-69°F in meadow and creeks, shallow tributaries, bay and marsh backwaters, and nearshore areas of coastal bays
- When prime habitats are not available, Northern pike can also spawn late April to mid-May in water temperatures between 45°F and 73°F in patchy aquatic weed beds along shoreline in bays, marshes and backwaters; in seasonally aquatic emergent vegetation appearing later in the spring; and in shallow submergent vegetation
- Northern pike can also spawn in near shore areas of bays and shoals (5-25 ft) that have permanently aquatic vegetation and are protected by ice. Northern pike spawn in these habitats from early to late May at water temperatures between 41°F and 60°F. They use these habitats only when better habitats are not available. Northern pike reproduction success in these areas is, however, very poor.

### Pike Nursery Habitat

- Boundary areas of dense weed mats of creeks, bays, shoals and open water
- Nearshore areas of water less than 6 ft deep
- Young pike enter these areas when water temperatures are mid-70°s-low 80°sF

*In many areas, Northern pike habitat has been lost from water flow changes in nearshore areas, allowing invasive plants to take over. Photo: Mary Penney, NY Sea Grant*



## **Risks to Northern Pike Nursery Habitat**

- Water level regulation that lowers volume/duration of nearshore spring flooding and affects the natural plant growth during the summer
- Deforestation, outdated farming practices, stream bank erosion increases sedimentation and nutrient flows that cause nuisance algae and invasive plant species in nearshore areas
- Increased nuisance plant invasion that replaces suitable vegetation in spawning areas
- Unplanned shoreline development that destroys nursery habitat
- Poorly designed culverts that reduce access between open waters and backwater spawning areas
- Careless use of herbicides and weed harvesting that destroys aquatic vegetation in spawning areas

## **Tips for Improving Northern Pike Habitats**

- Reduce wetland drainage from ditch plugging, ditch filling and removal of drain tiles
- Enact regulations to manage water loss and improve water levels in nearshore areas
- Install properly designed artificial water control devices to restore normal spring flows and to maintain water levels to enhance Northern pike reproduction
- Modify culverts to reconnect wetlands with open waters and improve flows
- Remove natural barriers to Northern pike migration into spawning areas
- Remove nuisance invasive vegetation
- Improve water quality in Northern pike habitats by reducing nutrient inflow from surrounding land
- Restore natural water level fluctuations in spawning areas by intentional water drawdown and spring flooding by water control devices

*This factsheet was written by New York Sea Grant Fisheries Specialist David B. MacNeill, 315-312-3042, dbm4@cornell.edu*

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